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ING AN	2009/0317555 A1*	12/2009	Hori B41J 2/0057
Ī			427/428.06
•	2010/0251916 A1*	10/2010	Peles G03G 15/11
			101/492
OTT (TTO)	2012/0256979 A1*	10/2012	Gordon B41J 2/17593

FOREIGN PATENT DOCUMENTS

EP	0 858 010 A1	8/1998		
EP	2 075 648 A2	7/2009		
EP	2 281 691 A1	2/2011		
JP	GB 1244901 A *	9/1971	(G03G 21/0088
JP	S58-82277 A	5/1983		
JP	2004-271833 A	9/2004		

* cited by examiner

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(57) ABSTRACT

A printer cleaning device cleans an image receiving surface treated with a surface preparation material. The cleaning surface includes an applicator that receives fluid from a receptacle and applies a portion of the fluid onto the image receiving surface of a printer. A wiper engages the image receiving surface to remove a portion of dried aqueous ink and fluid from the image receiving surface. The applicator is rotated in a direction opposite to a direction of movement of the image receiving surface. The dried aqueous ink and fluid removed by the wiper are diverted to a conduit to enable a pump to move the dried aqueous ink and fluid through a filter before returning the filtered fluid to the receptacle so the applicator can absorb the filtered fluid.

10 Claims, 5 Drawing Sheets

(54) SYSTEM AND METHOD FOR CLEANING AN IMAGE RECEIVING SURFACE IN AN INKJET PRINTER

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- (52) U.S. Cl. CPC *B41J 29/17* (2013.01)

(56) References Cited

U.S. PATENT DOCUMENTS

3,468,248 A 9/1969 Giori 2003/0156868 A1 8/2003 Shin et al.

